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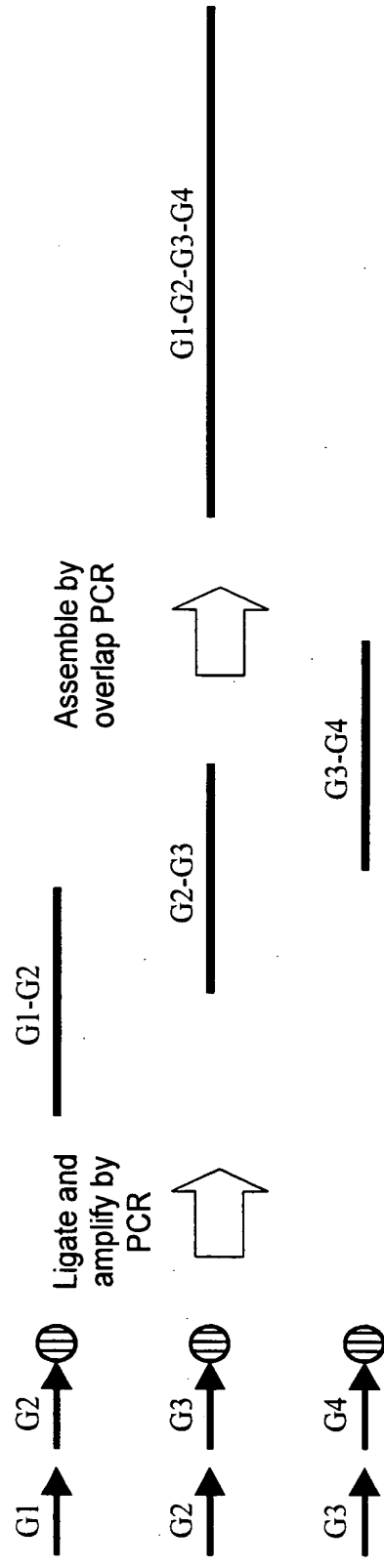


Figure 1

SECRET 350

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

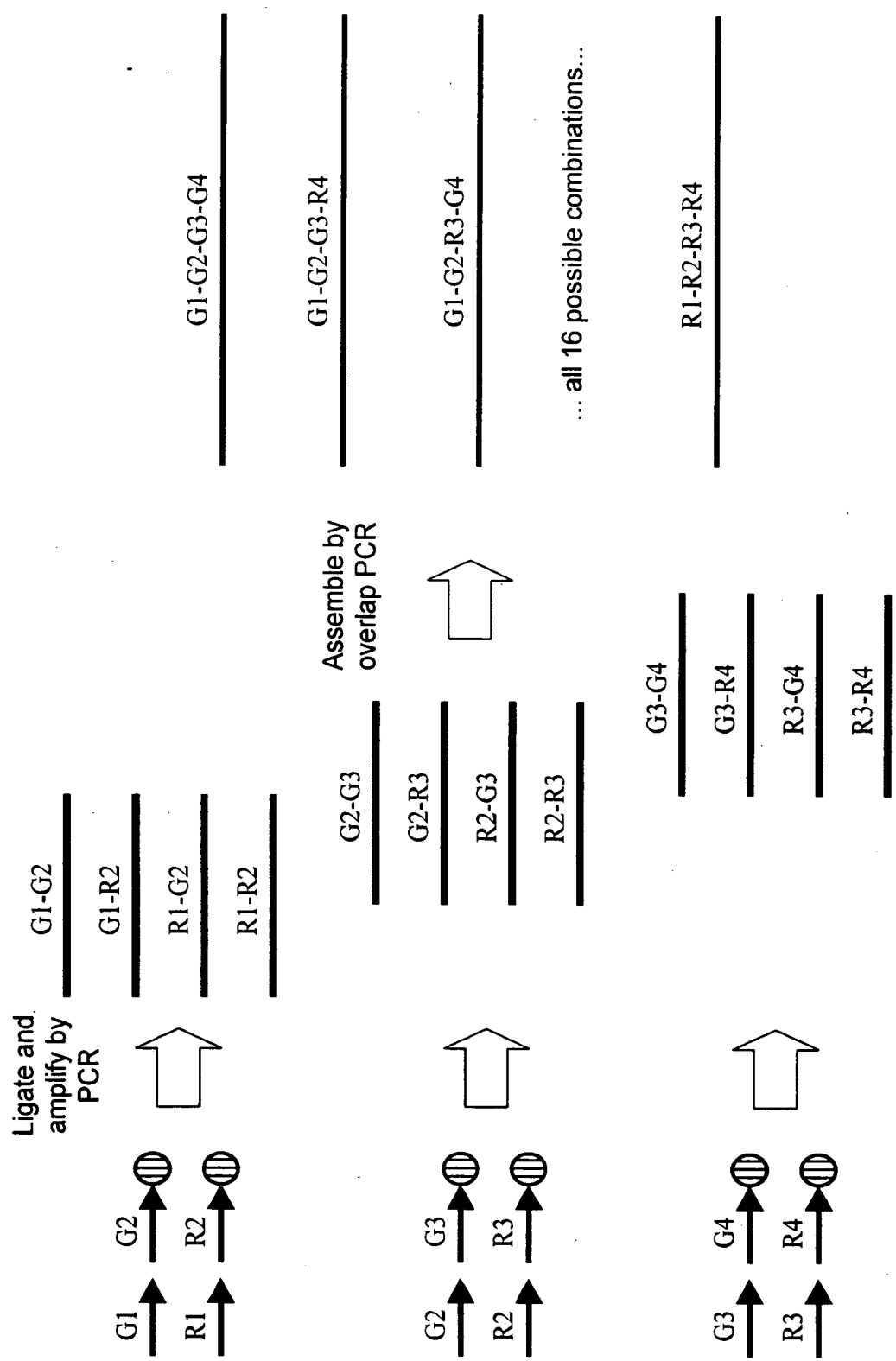


Figure 2

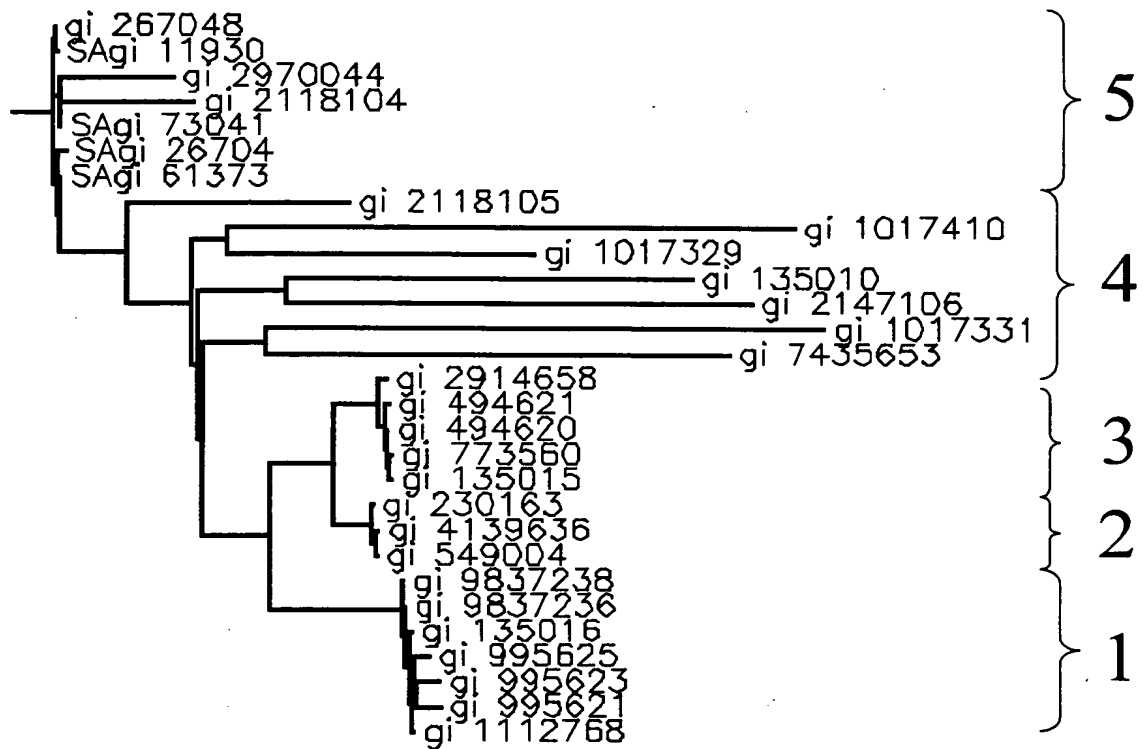


Figure 3

[illegible]

Amino Acid Sequence Alignments for 29 Subtilisin Carlsberg Related Proteins

SAgi 11930	-----M	KKPLGKIVAS	TALLISVAFS	SS-----	-----
gi 267048	-----	-----	-----	-----	-----
SAgi 73041	-----	-----	-----	-----	-----
SAgi 61373	-----	-----	-----	-----	-----
SAgi 26704	-----	-----	-----	-----	-----
gi 2970044	-----M	NKKMGKIVAG	TALIISVAFS	SS-----	-----
gi 2118104	-----M	KKLFTKVVAS	AALLLSISLT	AT-----	-----
gi 2118105	MNLQKIRSAL	KVKQSALVSS	LTILFLIMLV	G-----	-----
gi 1112768	-----MMRK	KSFWLGMLTA	FMLVFTMAFS	DS-----	-----
gi 135016	-----MMRK	KSFWLGMLTA	FMLVFTMAFS	DS-----	-----
gi 9837236	-----MMRK	KSFWLGMLTA	LMLVFTMAFS	DS-----	-----
gi 995621	-----MMRK	KSFWLGMLTA	FMLVFTMAFS	DS-----	-----
gi 995623	-----MMRK	KSFWLGMLTA	LMLVFTMAFS	DS-----	-----
gi 995625	-----MMRK	KSFWFGMLTA	FMLVFTMEFS	DS-----	-----
gi 9837238	-----	-----	-----	-----	-----
gi 549004	-----MRS	KKLWISLLFA	LTLIFTMAF-	SN-----	-----
gi 4139636	-----	-----	-----	-----	-----
gi 230163	-----	-----	-----	-----	-----
gi 135015	-----MRG	KKVWISLLFA	LALIFTMAFG	ST-----	-----
gi 773560	-----	---MISLLFA	LALIFTMAFG	ST-----	-----
gi 494620	-----	-----	-----	-----	-----
gi 494621	-----	-----	-----	-----	-----
gi 2914658	-----	-----	-----	-----	-----
gi 1017329	-----	MKRRVHVLIM	TILMIVLATG	TA-----	-----
gi 2147106	---MKKFKR	KGRLLDEKHE	MAIFFLFLLV	IL-----	-----
gi 135010	-----M	KNMSCKLVVS	VTLFFSFLTl	GP-----	-----
gi 7435653	---MVAVVTG	VIQVGTKIAA	IAIALIFILP	LF-----	-----
gi 1017410	-----MKT	MKTLVIVIGV	LALLFIVAIG	HVRDQDQALI	QTKEIPKTLE
gi 1017331	-----MNKR	LKRWSAIMSI	VLLVNLLVPV	GT-----	-----

D **E** **F** **G** **H** **I** **J** **K**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Figur 4C

LIGFNS--D-	-----	KAKGLIQNAG	G-----	-----
IVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
IVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
IVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
IVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
IVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
FVGFKS--G-	-----V	KTAS--VKKD	I IKESGG	-----
IVGFKQ--T-	-----M	SAMSSAKKKD	VI SEKGG	-----
IVGFKQ--T-	-----M	STMSAAKKKD	VI SEKGG	-----
IVGFKQ--T-	-----M	STMSAAKKKD	VI SEKGG	-----
LVGFKN--E-	-----A	AVQAFSNNVT	TS-----	-----
MILFRH----	-----H	IDDGILKKYD	I-----	-----
IVVYKN----	-----K	AGKETILDSD	A-----	-----
VVIAKINPE-	-----E	FNPKAVEALQ	G-----	-----
MLIGESTDDG	RL LIGELNLE	FVKKYVKDIA	AVADTNGNFF	IGGDNPDVSW
IVTYKD----	-----V	VSESPDSRLS	VY-----	-----
EEEVEIELLH	EFETIPVLSV	ELSPED----	-----	-----
VEDVEIDLLH	EFDFIPVLSV	ELDPQD----	-----	-----
DESIEMELLY	EFEDIPVVSV	ELSPED----	-----	-----
-----EIIH	EYTEFPVIYA	ELPEAA----	-----	-----
-----KVDK	QFRIINAACA	KLDKEA----	-----	-----
-----KVDK	QFRIINAACA	KLDKEA----	-----	-----
-----KVDK	QFRIINAACA	KLDKEA----	-----	-----
-----KVDK	QFRIINAACA	KLDKEA----	-----	-----
-----KVDK	QFRIINAGKA	KLDKEA----	-----	-----
-----KVDK	QFRIINAACA	TLDKEA----	-----	-----
-----KVQK	QFKYVNAAAA	TLDEKA----	-----	-----
-----KVQK	QFKYVDAASA	TLNEKA----	-----	-----
-----KVQK	QFKYVDAASA	TLNEKA----	-----	-----
-----AVEVQH	EYENLPVIVS	ELSTEV----	-----	-----
-----HAQK	KYETIPTVLA	ELNKSQ----	-----	-----
-----DVEQ	QYKHLPAVAV	TADQET----	-----	-----
-----KVIY	VADLAPVAII	SIPGKA----	-----	-----
QDQDERATQL	TSETVPELGW	DIHVQSEGQE	EEGPAYHEHQ	AVIRFKPNRD
-----ENEQ	TMKTLPIKTM	TVPVSE----	-----	-----

FIG. 4C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Figur 4D

```

-----V DALELDPAIS YIE--EDA EV TTM-----A QSV
-----V EALELDPAIS YIE--EDA EV TT-----M QTV
-----V KDLEKDPSIT YIE--EDIEV TIT-----N QVT
-----V SGLKNNPHID FIE--ENEEV EI-----A QTV
-----L KEVKNDPDVA YVE--EDHVA HAL-----A QTV
-----L KEVKNDPDVA YVE--EDHVA HAL-----A QTV
-----L EEVKNDPDVA YVE--EDHVA HAL-----A QTV
-----L KEVKNDPDVA YVE--EDHVA HGL-----G QTV
-----L KEVKNDPDVA YVE--EDHVA HVL-----G QTV
-----L KEVKNDPDVA YVE--EDHVA HAL-----G QTV
-----L EEVKNDPDVA YVE--EDHVA HAL-----A QTV
-----V KELKKDPSVA YVE--EDHIA HEY-----A QSV
-----V KELKKDPSVA YVE--EDHVA HAY-----A QSV
-----V KELKKDPSVA YVE--EDHVA HAY-----A QSV
-----A QLENDPSVE FIE--KNERV YL-----D PLV
-----V DKLRSEPEIA KVQANKTYKV QS-----Q IE
-----V KELKQDPDIL YVENNVSFTA ADSTDFKVL S DGTDTSDNFE
-----V GLLSKLPGVV SVSE DGVVQA MAKPPWAGGG NKS-QPAEVL
PAAWFATNPY RVVEEAPPFV VIESPNQTTV EIVEALS R--DYDLDFAEPN
-----V ERLKEDPNVV SVSLDQPLQL MSDTR-----ELGEH

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PWGISRVQAP AAHNRGLT--GS G---VKVAVL
PWGISRVQAP AAHNRGLT--GS G---VKVAVL
PWGISRVQAP AAHNRGLT--GS G---VKVAVL
PWGISRVQAP AAHNRGLT--GS G---VKVAVL
PWGINRVQAP IAQSRGFT--GT G---VRVAVL
PWGITRVQAP TAWTRGYT--GT G---VRVAVL
PWGIPYIYSD VVHRQGYF--GN G---VKVAVL
PYGIPLIKAD KVQAQGFK--GA N---VKVAVL
PYGIPLIKAD KVQAQGFK--GA N---VKVAVL
PYGIPLIKAD KVQAQGYK--GA N---VKVAVL
PYGIPLIKAD KVQAQGFK--GA N---VKVAVL
PYGIPLIKAD KVQAQGFK--GA N---VKVAVL
PYGIPLIKAD KVQAQGFK--GA N---VKVAVL
PYGIPLIKAD KVQAQGYK--GA N---VKVAVL
PYGISQIKAP ALHSQGYT--GS N---VKVAVI
PYGISQIKAP ALHSQGYT--GS N---VKVAVI
PYGISQIKAP ALHSQGYT--GS N---VKVAVI
PYGVSQIKAP ALHSQGYT--GS N---VKVAVI
PYGVSQIKAP ALHSQGYT--GS N---VKVAVI
PYGVSQIKAP ALHSQGYT--GS N---VKVAVI

```

FIG. 4D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Figur 4E

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PYGVSQIKAP ALHSQGYT-- -----GS N---VKVAVI
PYGVSQIKAP ALHSQGYC-- -----GS N---VKVAVI
MNNIQETDIP KLEERMKR-- -----GD G---VKIAVL
TWGYKKIYED SQYRSPFT-- -----GK G---VKVAVI
QWNLEPIQVK QAWKAGLT-- -----GK N---IKIAVI
PWGVDYIDAE LVWPDGVTGW VDV-----NGD GDGEIEVAVI
YRFTKQIQAP VTPNDEFFKE YQOWNLQQIDI EEGWSLASGE N---VKIAIL
DWNNDMVKAF DAWDDGYT-- -----GK G---VKVAVF

```

```

DTGIST-HPD LN--IRGGAS FVPGEP-STQ -DGNGHGTHV AGTIAALNNS
DTGIST-HPD LN--IRGGAS FVPGEP-STQ -DGNGHGTHV AGTIAALNNS
DTGIST-HPD LN--IRGGAS FVPGEP-STQ -DGNGHGTHV AGTIAALNNS
DTGIST-HPD LN--IRGGAS FVPGEP-STQ -DGNGHGTHV AGTIAALDNS
DTGIST-HPD LN--IRGGAS FVPGEP-STQ -DGNGHGTHV AGTIAALNNS
DTGISN-HAD LR--IRGGAS FVPGEP-NIS -DGNGHGTHV AGTIAALNNS
DTGIST-HPD LN--IRGGVS FVPGEP-SYQ -DGNGHGTHV AGTIAALNNS
DTGVAP-HPD LH--IRGGVS FISTEN-TYV -DYNHGTHV AGTVAALNNS
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DTGIQASHPD LN--VVGAS FVAGEA-YNT -DGNGHGTHV AGTVAALDNT
DSGIDSSHPD LN--VRGGAS FVPSET-NPY QDGSSHGTHV AGTIAALNNS
DSGIDSSHPD LN--VRGGAS FVPSET-NPY QDGSSHGTHV AGTIAALNNS
DSGIDSSHPD LN--VRGGAS FVPSET-NPY QDGSSHGTHV AGTIAALNNS
DSGIDSSHPD LK--VAGGAS MVPSET-NPF QDNNSHGTHV AGTVAALNNS
DSGIDSSHPD LK--VAGGAS MVPSET-NPF QDNNSHGTHV AGTVAALNNS
DSGIDSSHPD LK--VAGGAS MVPSET-NPF QDNNSHGTHV AGTVAALNNS
DSGIDSSHPD LK--VAGGAS FVPSET-NPF QDNNSHGTHV AGTVAALNNS
DSGIDSSHPD LK--VAGGAS FVPSET-NPF QDNNSHGTHV AGTVAALNNS
DTGIAS-HDD LH--VIDGVS FVSVEP-FYR -DLNGHGTHV AGTIAAQEND
DTGIASNHPD LK--VKGGTC VIRSDCGKGY NDDNGHGTHV AGIIGALDNG
DSGISP-HDD LS--IAGGYS AVSYTS--SY KDDNGHGTHV AGIIGAKHNG
DTGVDKDHPD LAGNIVWGIS VLNGRISSNY QDRNGHGTHV TGTVAALDND
DTGVDPNHPD IKDKIVNGYN AVEGNN--NF ADKHGHGTHV AGVAAAVTNN
DTGFDG-HQD IT--YAGGHS VFEGEP--YT HDHHGHGTHV AGIIGAREGT

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```

I-GVLGVAPN AELYAVKVLG ASGSGSVSSI AQGLEWAGNN G-----MH--
I-GVLGVAPS AELYAVKVLG ASGSGSVSSI AQGLEWAGNN G-----MH--
I-GVLGVAPS AELYAVKVLG ASGSGSVSSI AQGLEWAGNN G-----MH--
I-GVLGVAPS AELYAVKVLG ASGSGAISSI AQGLEWAGNN G-----MH--
I-GVLGVAPS AELYAVKVLG ADGRGAISSI AQGLEWAGNN G-----MH--
I-GVLGVAPN VDLYGKVLG ASGSGSISGI AQGLQWAANN G-----MH--
I-GVVGAPN AELYAVKVLG ANGSGSVSSI AQGLQWTAQN N-----IH--
Y-GVLGVAPG AELYAVKVLG RNGSGSHASI AQGIEWAMNN G-----MD--
T-GVLGVAPS VSLYAVKVLN SSGSGSYSGI VSGIEWATTN G-----MD--
T-GVLGVAPS VSLYAVKVLN SSGSGTYSGI VSGIEWATTN G-----MD--
T-GVLGVAPN VSLYAVKVLN SSGSGSYSGI VSGIEWATTN G-----MD--
T-GVLGVAPS VSLYAVKVLN SSGSGSYSGI VSGIEWTTN G-----MD--
T-GVLGVAPS VSLYAVKVLN SSGSGSYSAI VSGIEWATTT G-----MD--

```

104200-0000


```
--AG---SIS YPARYANAMA VGATDQNNNR ASFSQYGAGL DIVAPGVNVQ
--AG---SIS YPARYANAMA VGATDQNNNR ASFSQYGAGL DIVAPGVNVQ
--AG---SIS YPARYANAMA VGATDQNNNR ASFSQYGAGL DIVAPGVNVQ
--AG---SIS YPARYANAMA VGATDQNNNR ASFSQYGAGL DIVAPGVNVQ
--AS---SIS YPARYANAMA VGATDQNNNR ASFSQYGAGL DIVAPGVNVQ
```

--AG---NVG	FPARYANAMA	VGATDQNNNR	ASFSQYGAGL	DIVAPGVGVQ
--SG---TVS	YPARYANALA	VGATDQNNNR	ASFSQYGTGL	NIVAPGVGIQ
QQGGS--NNMG	YPARYASVMA	VGAVDQNGNR	ANFSSYGSEL	EIMAPGVNIN
S-SGNTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGNTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGNTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGNTNTIG	YPAKCDVIP	VGGEDSNSNR	SSFSSVGAEL	EVMAFVSGVY
S-SGNTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGYTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGNTNTIG	YPAKYDSVIA	VGAVDSNSNR	ASFSSVGAEL	EVMAPGAGVY
S-SGSTSTVG	YPAKYPSTIA	VGAVNSSNQR	ASFSSVGSEL	DVMAPGVSIQ
S-SGSTSTVG	YPAKYPSTIA	VGAVNSSNQR	ASFSSAGSEL	DVMAPGVSIQ
S-SGSTSTVG	YPAKYPSTIA	VGAVNSANQR	ASFSSAGSEL	DVMAPGVSIQ
T-SGSSSTVG	YPGKYPSVIA	VGAVDSSNQR	ASFSSVGPEL	DVMAPGVSIQ
T-SGSSSTVG	YPGKYPSVIA	VGAVDSSNQR	ASFSSVGPEL	DVMAPGVSIQ
T-SGSSSTVG	YPGKYPSVIA	VGAVDSSNQR	ASFSSVGPEL	DVMAPGVSIQ
T-SGSSSTVG	YPGKYPSVIA	VGAVDSSNQR	ASFSSVGPEL	DVMAPGVSIQ
T-SGSSSTVG	YPAKYPSVIA	VGAVDSSNQR	ASFSSVGPEL	DVMAPGVSIQ
E-ADKQHTID	YPARYDSVVA	VGAVDGNNER	ASFSSYGEQL	EIMAPGVEIH
S-VGSKNTIL	YPAKYSSVIA	VGSVDSRLQR	LPFSATGPEL	EIVAPGQYVF
---GNGKPVN	YPAAYSSVVA	VSATNEKNQL	ASFSTTGDEV	EFSAPGTNIT
----GADSPS	YPAAYPEVIA	VGAI DENG NV	PSWSNRNPE-	-VAAPGVNIL
-----VEDPL	YPAIYEEVLT	VAAVDDTRNR	AFFSNFGKHI	DVTAPGEHIP
KADGSGETIE	YPAKYDEVIA	VASVDKEMKR	TNTSATGVEN	ELAAPGHLIG

STYPGSTYAS	-----L	NGTSMATPHV	AGAAALVKQK	-----NP
STYPGSTYAS	-----L	NGTSMATPHV	AGAAALVKQK	-----NP
STYPGSTYAS	-----L	NGTSMATPHV	AGVAALVKQK	-----NP
STYPGSTYAS	-----L	NGTXMATPHV	AGAAALVKQK	-----NP
STYPGSTYAS	-----L	NGTSMATPHV	AGAAALVKQK	-----NP
STVPGNGYSS	-----F	NGTSMATPHV	AGVAALVKQK	-----NP
STYPGNRYAS	-----L	SGTSMATPHV	AGVAALVKQK	-----NP
STYLNNGYRS	-----L	NGTSMASPHV	AGVAALVKQK	-----HP
STYPTNTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STYPTSTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STYPTSTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STYPTNTYTT	-----L	NGTSMASPHV	AGTSALILSK	-----HP
STYPTNTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STYPTNTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STYPTSTYAT	-----L	NGTSMASPHV	AGAAALILSK	-----HP
STLPGGTYGA	-----Y	NGTSMATPHV	AGAAALILSK	-----HP
STLPGGTYGA	-----Y	NGTCMATPHV	AGAAALILSK	-----HP
STLPGGTYGA	-----Y	NGTSMATPHV	AGAAALILSK	-----HP
STLPGNKYGA	-----Y	NGTSMASPHV	AGAAALILSK	-----HP
STLPGNKYGA	-----Y	NGTSMASPHV	AGAAALILSK	-----HP
STLPGNKYGA	-----Y	SGTCMASPHV	AGAAALILSK	-----HP
STLPGNKYGA	-----K	SGTCMASPHV	AGAAALILSK	-----HP
STLPGNKYGA	-----K	SGTSMASPHV	AGAAALILSK	-----HP
STFLFNRYER	-----L	SGTSMASPHV	TGAAALIKSN	-----NP
STFPINLDTT	DGKKDGYTAL	SGTSMALPHL	YTGALAATLK	-----TS
STYLNQYYAT	-G-----	SGTSQATPHA	AAMFALLKQR	-----DP
STYPDDTYEE	-----L	SGTSMATPHV	SGTVALIQAA	RLAAGLPLLP

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Figur 4H

SLFPDNQYTV -----M SGTSMASPHA AGLAGLIRSL -----RP
GLAPGNKYVF -----M SGTSQATPHV TSLAAILMGK -----HP

-----SWSNV QIRNHLKNTA TSLGSTNL-- -YGSGLVN-- -----
-----SWSNV QIRNHLKNTA TSLGSTNL-- -YGSGLVN-- -----
-----SWSNV QIRNHLKNTA TGLGNTNL-- -YGSGLVN-- -----
-----SWSNV QIRNHLKNTA TSLGSTNL-- -YGSGLVN-- -----
-----SWSNV QIRNHLKNTA TSLGSTNL-- -YGSGLVN-- -----
-----SWSNV QIRNHLKNTA TNLGNTNQ-- -FGSGLVN-- -----
-----SWSNT QIRQHLTSTA TSLGNSNQ-- -FGSGLVN-- -----
-----HLTAA QIRNRMNQTA IPLGNSTY-- -YGNGLVD-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----NLSAS QVRNRLSSTA TYLGSSFY-- -YGKGLIN-- -----
-----TWTNA QVRDRLESTA TYLGNSFY-- -YGKGLIN-- -----
-----TWTNA QVRDRLESTA TYLGNSFY-- -YGKGLIN-- -----
-----TWTNA QVRDRLESTA TYLGNSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----NWTNT QVRSSLENTT TKLGDSFY-- -YGKGLIN-- -----
-----ELTNE QIRKRLNTTA TPLGNPFY-- -YGHGLLN-- -----
--IKTNRPAQ NPQNTSDQNA KDLGTAGKDS LYGYGLVQIK TFQP-----
--AETNVQL- --REEMRKNI VDLGTAGRDQ QFGYGLIQYK AQAT-----
PGSESDTTPD TVRGVLHTTA TDAGDPGYDS LYGYGIID-- -----
----DLNQ EVMDIMKKA KDLGPKGHDV YYGHGEID-- -----
----ELSSQ QIRALLVEQS LDLGSEGHDR LYGYGLAQYV SSTPPDEEN

----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEAATR -----
----AEYAAQ -----
----V-----
----VEAAAQ -----
----VEAAAQ -----
----VEAAAQ -----
----VEAAAQ -----
----VEAAAQ -----
----VEAAAQ -----
----VEAAAQ -----
----VQAAAQ -----
----VQAAAQ -----
----VQAAAQ -----
----VQAAAQ -----

FIG. 4H

```

-----VQAAQ-----
-----VQAAQ-----
-----VQAAQ-----
-----VQAAQ-----
-----VDAALD-----
--TLSSDMAV KAVK-----ADNGLWS--- --SRS-ISP IPFK--SLAE
--DSAYAAAE QAVK-----KAEQTKAQID INKARELISQ LPNSDAKTAL
----AYDAVQ TAVS-----S-----
----IEAALK AIRT-----S-----
EESPAENPQE QPSDGKENEG SEDQGSTPPD EEENEESPAE DPQEQPSDGK

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[illegible]

